

WHAT IS CLAIMED IS

1. A digital TV receiver comprising: a tuner which receives digital broadcast signals delivered from TV stations; a decoder for decoding the received digital broadcast signals; an output device for outputting the decoded digital broadcast signals to a monitor display apparatus; a memory for memorizing at least a primitive program and a control program; a main controller for controlling the digital TV receiver corresponding to the control program; and a connection device to which an external memory apparatus memorizing a control program can be connected; wherein

the connection device includes an IDE connector to which an IDE cable connected to the external memory apparatus is connected;

when the external memory apparatus is connected to the connection device, the main controller accesses the external memory apparatus for reading out the control program, and writes the readout control program into the memory or updates an existing control program memorized in the memory with the readout control program.

2. The digital TV receiver in accordance with claim 1, wherein

the main controller judges whether the external memory apparatus is connected to the connection device or not just after switching on of a power supply of the digital TV receiver.

3. The digital TV receiver in accordance with claim 1, wherein

the main controller judges whether the external memory

apparatus is connected to the connection device or not by utilizing opening terminals of the IDE connector which are not used for transmitting and receiving signals.

4. The digital TV receiver in accordance with claim 1, wherein

the memory further memorizes a primitive program which is activated just after switching on of the power supply of the digital TV receiver, and

the main controller judges whether the external memory apparatus is connected to the connection device or not corresponding to the primitive program.

5. The digital TV receiver in accordance with claim 1, wherein

when the existing control program is memorized in the memory, the control program readout from the external memory apparatus is written in the memory after erasing the existing control program.

6. The digital TV receiver in accordance with claim 1, wherein

when the existing control program is memorized in the memory, the control program readout from the external memory is compared with the existing control program before the update, and only modified portions in the control program are updated.

7. The digital TV receiver in accordance with claim 1, wherein

when the main controller judges that the external memory apparatus is not connected, the main controller reads out the control program from the memory, and activates the control program for controlling whole of the digital TV receiver corresponding to the control program.

8. The digital TV receiver in accordance with claim 1, wherein

at least a portion of the memory for memorizing the control program is a rewritable nonvolatile memory.

9. A digital TV receiver comprising: a tuner for receiving digital broadcast signals which are encoded, compressed and delivered by TV stations; a decoder for decoding the broadcast signals received by the tuner; an output device for outputting the encoded broadcast signals to an image display apparatus; a control program memory of a rewritable nonvolatile memory for memorizing a control memory by which whole of the digital TV receiver is controlled; a primitive program memory of a nonvolatile memory for memorizing a primitive memory which is activated just after switching on of a power supply of the digital TV receiver; and a main controller for controlling whole of the digital TV receiver corresponding to the primitive program or the control program; wherein

a connection device including an IDE connector, to which an external memory apparatus memorizing a control program is connected through an IDE cable, is further provided;

the main controller judges whether the external memory apparatus is connected to the connection device or not corresponding to the primitive program just after switching on of the power supply with utilizing opening terminals of the IDE connector which are not used for transmitting and receiving signals between the connection device and the external memory apparatus;

when the main controller judges that the external memory apparatus is connected to the connection device, the main controller accesses the external memory apparatus for reading out the control program memorized at a predetermined address in the external memory apparatus, and writes the readout control program or updates an existing control program memorized in the control program memory with the readout control program corresponding to the primitive program; and

when the main controller judges that the external memory apparatus is not connected to the connection device, the main controller reads out the existing control program memorized in the control program memory corresponding to the primitive program, and controls whole the digital TV receiver corresponding to the control program.

10. The digital TV receiver in accordance with claim 9, wherein

when the existing control program is memorized in the memory, the control program readout from the external memory apparatus is written in the memory after erasing the existing control

program.

11. The digital TV receiver in accordance with claim 9,
wherein

when the existing control program is memorized in the memory, the control program readout from the external memory is compared with the existing control program before the update, and only modified portions in the control program are updated.

12. The digital TV receiver in accordance with claim 9,
wherein

when the main controller judges that the external memory apparatus is not connected, the main controller reads out the control program from the memory, and activates the control program for controlling whole of the digital TV receiver corresponding to the control program.

13. The digital TV receiver in accordance with claim 9,
wherein

at least a portion of the memory for memorizing the control program is a rewritable nonvolatile memory.